

Wood Framed Building Deconstruction and the Salvage of Reusable Lumber at Badger Army Ammunition Plant

Issue—The U.S. Environmental Protection Agency (EPA) estimates that more than 245,000 buildings are disposed of annually. The majority of these buildings contain a significant quantity of wood that could be reused rather than disposed of in landfills. If building deconstruction (dismantlement) and lumber salvage were to replace demolition and landfilling, over a billion board feet of high-quality lumber could be reclaimed for reuse each year. One very promising market for this lumber is structural framing and millwork in new construction and remodeling.



Like many of the U.S. military's industrial manufacturing and infantry training facilities, the U.S. Army's Badger Army Ammunition Plant in Baraboo, Wisconsin, was built in the early years of World War II. Because metal was in great demand for the war effort, many of the military's structures were built from wood. The standing timber in these military structures is some of the last remaining of our Nation's once vast old-growth forests. We believe that Wisconsin's Badger Army Ammunition Plant contains a wealth of high-quality lumber that has great potential for reuse. In addition, implementing deconstruction at the Badger Army Ammunition Plant will provide the basis for local construction job training and small business development.

An initial level of Congressional funding (\$475,000) has been made available for evaluating the quality and quantity of salvageable lumber in the 1,500 buildings at the site. A more comprehensive level of support is needed to demonstrate deconstruction at the site and further the practice nationally.

Specific Tasks

- Implement a pilot deconstruction project for building types identified in phase one.
 - Use deconstruction to remove selected buildings using Habitat for Humanity and other local groups
 - Verify yields and identify local markets for salvaged lumber
 - Identify other recyclables
- Develop standards for deconstruction
 - Work with industry associations and standards agencies to develop standard practices for deconstruction and lumber salvage
 - Work with partners to develop policies on mitigation of lead-based paint in lumber from deconstruction

Potential Cooperators

U.S. Army
USDA Forest Service, Forest Products Laboratory
USDA Dairy Forage
U.S. Army Corps of Engineers, Construction Engineering Research Laboratory
U.S. Environmental Protection Agency
University of Wisconsin
Habitat for Humanity International
Wisconsin Department of Natural Resources
Ho-Chunk Tribal Nation
WasteCap Wisconsin



